

ABSTRACT

A method and system for identifying harmful airborne biota, particularly insects, and including plant material, such as mold spores and pollen, and flying insects and birds and either killing or disabling the harmful airborne biota is disclosed. Lasers, radar, and other types of radiation may be used to illuminate at least a perimeter around assets to be protected, with radiation returns detected and applied to a pattern classifier to determine whether the detected insects of interest are harmful, benign or beneficial. In the event the insects are determined to be harmful, a variety of measures responsive to the radiation returns may be taken to eliminate the harmful insects, these measures including firing pulses of beamed energy or radiation of a sufficient intensity to at least incapacitate them, or mechanical measures such as controlled drone aircraft to track and kill the pests.